

# Phillips Fuel Systems Inc.

## PREVENTATIVE MAINTENANCE GUIDELINES

Site Name/Location			
Customer		Installation Date	
Site Contact Name		Inspection Date	
Site Phone Number		Inspected By	
Equipment			
Comments			
Item Inspected	Yes	No	Comments / Recommendations / NA
Ensure O&M Manuals are present along with wiring diagrams, and original startup documentation which should include vacuum and pressure gauge readings.			
All Equipment, Control Panel(s), Tank(s), and Mounting Skids are inspected and is in new or like new condition. Paint is in good condition. No Rust scratches, or dents.			
Verify there are no leaks from any equipment Tank(s), Pump(s), and related piping.			
Check all wiring connection and ensure there are no frayed or open wires, poor or loose connections.			
Open Control Panel(s) to ensure the fusible Disconnect functions properly. (If equipped)			
Operate Pumps in manual mode to ensure they are operational and functioning normal. Observe flow switch indicator on user interface or PLC Input light (if equipped).			
Test Leak detection switches. On Pump sets and enclosures, remove one screw on the bracket and rotate the switch upside down to 'change the state' of switch. On Double wall day tanks, the float on the leak switch may be accessed through the ½" NPT plugged fitting adjacent to it. Remove plug and use a stout piece of wire or a screwdriver to lift float to 'change the state' of switch. Or Main Tank Leak Switches via 2" top secondary fitting.			
Shut Off/Test Circuit Breakers at main powers panel to ensure no power is present at control panel or pumps when breaker is off.			
Replace any batteries if supplied with Equipment			

# Phillips Fuel Systems Inc.

## PREVENTATIVE MAINTENANCE GUIDELINES CONT.

Item Inspected	Yes	No	Comments / Recommendations / NA
Ensure system is properly grounded			
On FAN COOLED MOTORS: Inspect areas around the fan intake and exit – remove any foreign obstructions that might impede air flow			
Observe vacuum and pressure gauge readings under normal operation – how do they compare with startup vacuum and pressure gauge readings?			
ON STRAINERS: Periodically, remove and inspect the 'basket' element. Remove foreign objects and dirt and gels that may impede flow.			
On systems with POSITION SWITCHES: Manually actuate the device such that the position switch <i>should</i> be engaged. Read the electrical diagram and verify the PLC light has changed state. Actuate to the opposite position, verify the PLC light has changed state.			
<b>TROUBLESHOOTING</b>			
Discrete level float switch: POWER DOWN; mark wires, unwire, remove from tank, rewire. POWER UP; Move floats – observe PLC input lights. Do they change state on moving floats?			
Continuous level probe: POWER DOWN; mark wires, unwire, remove from tank, rewire. POWER UP; Move float – observe analog display. Linear incremental changes?			
Shuttle type flow switches; Turn system OFF. Close isolation valves on either side of flow switch. Be prepared to catch any spillage from opening the 'bonnet'. Loosen 'bonnet' and remove. Inspect components on rod. Magnet intact? Does assembly move freely on rod? When moving assembly to the top of the rod, does the PLC input light change state?			